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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/652,024

09/02/2003

Frederik De Meyer

Q76821

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23373 7590 09/18/2007  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

HARTMAN JR, RONALD D

ART UNIT

PAPER NUMBER

2121

MAIL DATE

DELIVERY MODE

09/18/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/652,024

Applicant(s)

DE MEYER ET AL.

Examiner

Ronald D. Hartman Jr.

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 37-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 37-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 43-44 and 50 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims 43-44, the specification, as originally filed, never specifically disclosed any mention of distance, particularly any mention of "approximately ten meters" or "approximately hundred meters", as claimed by pending claims 43 and 44, and therefore these features contain subject matter that is believed to be representative of new matter. There is simply no disclosure of any distance measurements within the specification as originally filed, and therefore, it appears that the applicant is improperly attempting to limit "short range" using feature which were not previously presented, and it is for this reason that the examiner contends this represents new matter.

As per claim 50, the specification, as originally filed, does not provide adequate support for a feature wherein different types of HMI data are assigned to the mobile unit based on whether the technical installation is visible from a location of the assigned mobile unit. The examiner found only 3 instances of visualization, these being [0004], [0022] and [0060], however none of these passages appear to provide support for what is claimed. Therefore, this feature is believed to represent new matter.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 5-12, 15-24, 37-42 and 45-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kretschmann, U.S. Patent No. 6,167,464, in view of Elsbree et al., U.S. Patent No. 7,017,116.

As per claims 1 and 15, and as best understood, these claims appear to provide for a system and method in which a mobile control and monitoring unit's position is detected by way of positioning signals, and when the position is within a control area, of a technical installation, HMI data is loaded into the mobile unit that allows the mobile unit to control the technical installation using the loaded HMI data.

The features of claims 1 and 15 appear to be adequately disclosed by Kretschmann, U.S. Patent No. 6,167,464 (e.g. C7 L22-32 and C6 L56-62).

It is noted, however, that the disclosure of Kretschmann does not specifically disclose the portable unit being utilized to control the nearby equipment.

That is, Kretschmann does not specifically teach the portable HMI controlling equipment of the installation.

Elsbree et al. teaches these features (e.g. C10 L14-30).

It would have been obvious to one of ordinary skill in the art to include a feature wherein the equipment may be controlled, in addition to being monitored, for the purpose of supplementing monitoring with control so that the operator of the portable unit is not only provided with a means to monitor equipment, but is also provided with a means to control it as well. Therefore, in essence, a portable monitoring and control unit is formed.

As per claim 2, "display data" has been interpreted to correspond to any data regarding the status or operations of the equipment in the control area, which is displayed on the mobile unit (e.g. See Kretschmann; C1 L56-65, C6 L46-55 and Figure 8).

As per claim 3, process values representing the display data is adequately disclosed by Kretschmann's combined system (e.g. See Kretschmann; C5 L21-53).

As per claims 5-6, Kretschmann's combined system teaches initialization values (e.g. See Kretschmann; C5 L26-27).

As per claims 7 and 16, and as best understood, Kretschmann's combined system adequately discloses the updating of HMI data on the mobile unit (e.g. Kretschmann; corresponds to displaying status data; C1 L56-65, C6 L46-55 and Figure 8).

As per claim 8, Kretschmann's combined system teaches updating input data (e.g. Kretschmann; C1 L56-65, C6 L46-55, C5 L21-53 and Figure 8).

As per claim 9, Kretschmann's combined system teaches specified values for the technical installation (e.g. Kretschmann; C1 L56-65, C6 L46-55, C5 L21-53 and Figure 8).

As per claim 10, desired values and default values are adequately disclosed by Kretschmann (e.g. Kretschmann; C1 L56-65, C6 L46-55, C5 L21-53 and Figure 8).

As per claims 11-12, and as best understood, Kretschmann's combined system adequately discloses the transmission of the HMI data since the HMI data may be sent from the central computer to the mobile unit based on the position of the mobile unit (e.g. Kretschmann; C7 L22-32).

As per claim 17, Kretschmann's combined system adequately discloses that the mobile unit is integrated into the technical installation (e.g. Kretschmann; Figures 1 and 2).

As per claim 18, Kretschmann's combined system teaches a data bus (e.g. Kretschmann; Figure 1 element 16).

As per claims 19 and 42, Kretschmann's combined system teaches wireless communications (e.g. Kretschmann; RF link; Figure 1 element 29).

As per claim 20, Kretschmann's combined system teaches a receiver (e.g. Kretschmann; Figure 1).

As per claims 21-22, Kretschmann's combined system teaches a position-determining device (e.g. Kretschmann; GPS; C3 L9).

As per claims 23 and 42, Kretschmann's combined system teaches a short-range communication mechanism (e.g. Kretschmann; RF link; Figure 1 element 29).

As per claim 24, Kretschmann's combined system teaches the use of infrared (e.g. Kretschmann; C3 L6-7).

As per claims 37-40, this claim provides for a feature wherein the portable HMI is assigned to the installation only if the current position is within a regional sub-control area of the installation. This appears to represent a capability that is obvious to Kretschmann's combined system since Kretschmann's combined system teaches loading pertinent data to the portable HMI when the portable HMI is within the vicinity of a particular machine or piece of equipment, so a proper reading of Kretschmann's combined system would lead one to conclude that information is not loaded into the portable HMI when it is not in the vicinity of a pertinent machine or piece of equipment,

Art Unit: 2121

and therefore it is loaded only when the current position of the portable HMI is within a regional sub-control area of the installation.

As per claim 41, loading data into the portable HMI based on the current position of the portable HMI within the factory is disclosed by Kretschmann's combined system.

As per claims 45-46, it is the examiners opinion that the portable HMI, disclosed by Kretschmann's combined system, is remote from the installation (factory) since a proper reading of Kretschmann would lead one to conclude that if the portable HMI is moved about the factory, it must be remote from the machines it is used to monitor and control since the portable unit is not physically integrated in to the machine itself and is therefore operated from at least some distance from the machine, thereby forming a remote controlling and monitoring device.

As per claim 47, a feature wherein the display is "set up", as best understood, has been interpreted to correspond to displaying features of the factory on the portable HMI (e.g. Kretschmann; status data being displayed; C1 L56-65, C6 L46-55 and Figure 8).

As per claim 48, inputting values to change the operating state of the installation corresponds to Kretschmann's combined system teaching the portable HMI being used to monitor and control a factory, as already discussed above.

As per claim 49, as best understood, it appears that the "type" of data transmitted to the portable HMI corresponds to the pertinent information related to a specific piece of equipment or machine that the portable HMI is positioned by, as already discussed above.

2. Claims 4 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kretschmann's combined system, in view of Official Notice.

As per claim 4, although Kretschmann adequately discloses displaying actual values, Kretschmann does not specifically teach displaying alarm messages. Official Notice is taken with respect to this feature and its incorporation into Kretschmann would have been obvious to one of ordinary skill in the art at the time the invention was made for the purpose of allowing the operator of mobile unit to know when a problem exists in the technical installation.

In support of the examiner's holding of Official Notice, with respect to this feature, the examiner hereby provides Oberg et al., U.S. Patent No. 7,143,149 which details a system for remotely monitoring and controlling a control system whereby a mobile control unit is used for monitoring and controlling the process, wherein an alarm signal may be sent to the wireless mobile device (e.g. C12 L5-9).

As per claims 13 and 14, Kretschmann's combined system does not specifically teach utilizing a mobile telephone or a PDA for the mobile unit.

Official Notice is taken with respect to these features as their incorporation would have been obvious at the time the invention was made for the purpose of allowing a common well known portable communication device to be utilized as the mobile communication conduit, thereby forming a more flexible communication system, and this would also alleviate the need for a dedicated mobile unit to be manufactured or designed for each technical installation since both mobile telephones and PDA's are extremely abundant, relatively cheap, easy to operate and may be procured by practically anyone.

In support of the examiner's holding of Official Notice, with respect to this feature, the examiner hereby provides Oberg et al., U.S. Patent No. 7,143,149 which details a system for remotely monitoring and controlling a control system whereby a mobile control unit may take the form of a PDA or mobile telephone (e.g. C8 L28-42).

3. Claims 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kretschmann's combined system, in view of Official Notice.



As per claims 43-44, short-range communications of approximately 10 meters or 100 meters is a feature that is obvious to Kretschmann's combined system since Kretschmann's combined system teaches utilizing short range communications, and since it would provide the portable HMI with a feature that would allow for effective communications over a known range for short-range communications.

### ***Response to Amendment***

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald D. Hartman Jr. whose telephone number is (571) 272-3684. The examiner can normally be reached on Mon.-Fri., 11:00 - 8:30 pm, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 11, 2007  
RDH

X RDH

Ronald D Hartman Jr.  
Primary Examiner; Art Unit 2121

*R D Hartman Jr.*